

Notice of Allowability

Application No.

10/045,043

Examiner

Charles Chow

Applicant(s)

KIM ET AL.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/16/2005.
2. ☒ The allowed claim(s) is/are 1-19.
3. ☒ The drawings filed on 15 January 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 7/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Detailed Action

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

Applicant amended other independent claims 1, 6, based on the objected, allowed features, and claims 9-19 were allowed in the previous office action.

Claims 1-19 are allowable over the prior art of record, the prior art fails to teach singly, particularly, or in combination, the subject matter, for the allowable structure features that a single **casing which accommodates the tuner, modulator, demodulator** (page 9 of applicant's amendment), for tuner block comprising a tuner which tunes a broadcast signal, an IF/demodulator which demodulates broadcast signal tuned by tuner; a modulator which modulates an input video signal and an input audio signal into an rf signal; a single casing which accommodates the tuner, the IF/demodulator circuit and the modulator, wherein the tuner, IF/demodulator circuit and the **modulator are integrally formed in the single casing**; and a plurality of pins disposed consecutively on an outer side of the casing, the plurality of pins to input and/or output signals and a voltage to operate the tuner, the IF/demodulator circuit and the modulator; wherein one of the plurality of pins is a power supply pin through which an electrical power is supplied from an outside power supply, and the tuner and the modulator are connected commonly to the power supply pin in side of the casing [**claim 1**]; and having further claimed features, for the wherein **the first pin is an audio input pin** which inputs an audio signal transmitted form an audio/video block, the **second pin is a channel selection pin**, which inputs a channel selection signal which selects an output channel of the modulator, **the fourth pin is a control pin which inputs control signal to**

convert between a TV mode and a VCR mode, and the fifth pin is video input pin which inputs the input video signal [claim 6]. The dependent claims are also allowable due to their dependency upon the independent claims and the additional claimed features.

The closest patent to **Iwase et al. (US 5,710,999)** teaches a tuner having plurality of pins with the additional plug-in modulator (Fig. 19) in a separate casing (Fig. 18A-19, the circuitry taking video in at 523, audio in at 528 and providing RF out signal at terminal 534, Fig. 18A, col. 13, line 58 to col. 14, line 6). **Iwase fails to teach a modulator integrally formed in a single casing of the tuner block.**

Patent to **Geiger et al. (US 4,689,825)**, or **Kumamoto et al. (US 4,691,378)** fails to teaches **the modulator integrally formed in a single casing.**

Other prior arts in below has been considered, but they fail to teach the above claimed features.

Levine (US 5,915,068) teaches a modulator 36 for receiving clock signal form clock 30 (Fig. 2) in order to synchronize modulator 36 for alphanumeric message display on television screen (abstract, col. 3, lines 42-56, col. 4, lines 20-47). Levine teaches the programmable VCR for the operator interactively programmable routing display by utilizing the television screen, to flexibly displaying the programming routine in the video recorder with less cost (col. 1, line 28-66). Levine fails to teach the above allowable features.

Sasaki (US 2003/0063,225 A1) teaches the video apparatus tuner mounting board having plurality of circuit paths and pin wholes for mounting different tuners, tuners 10, 20, having switches 7-1, 7-2, 8-1, 8-2, for enabling signals for different tuners (abstract, Fig. 1-3, [0010-0012, 0022-0024, --27-0028]. Sasaki fails to teach the above allowable features.

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Kohn (US 4,509,210) teaches the television receiver with adaptable descrambler module (abstract, Fig. 1-2) having connector 40 with jumper in Fig. 2 for signal connection jumpers to adapt different descrambler module (col. 5, lines 9-53). Kohn fails to teach the above allowable features.

Takahama (US 4,569,084), Hall et al. (US 6,404,309 B1), Ohwaki et al. (US 5,913,173), Kim (US 6,483,554 B1), Kubo et al. (US 5,355,532), Nagai et al. (US 5,457,817), they failed to teach the above allowable features.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C. Chow whose telephone number is (703) 306-5615. The examiner can normally be reached on 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703) 305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information

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about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Chow C.C.

April 17, 2005.


EDWARD E. UPTON
SUPERVISOR
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